Claims:

1. A method for detecting tumour susceptibility, characterised in that a nucleic acid of a subject is isolated and the sequence of the human MDM2 gene is genotyped using the base exchange A → G (GAA → GAG) at position 354 in exon 12, and in which method a determination of the allelic status of this polymorphic gene locus is effected.

2. The method according to claim 1, characterised in that the detection of homozygous or heterozygous polymorphism (mutation) is used as a sufficient criterion for the genetic predisposition to a potential tumour susceptibility.

3. The method according to claim 1 or 2, characterised in that the detection of homozygous or heterozygous polymorphism (mutation) is used as a sufficient criterion for the genetic predisposition to a potential tumour risk for the subject and his descendants.

4. The method according to any of claims 1 to 3, characterised in that the detection of homozygous or heterozygous mutation is used as a sufficient criterion for a potential tumour susceptibility to prostate carcinoma, breast carcinoma, cervical carcinoma and/or ovarian carcinoma.

5. The method according to any of claims 1 to 4, characterised in that the genotyping is effected by sequencing the DNA or by other methods that are suitable for the detection of point mutations.

6. The method according to any of claims 1 to 5, characterised in that the genotyping is effected by DNA-ELISA using multiple, highly specific amplification primers and labelled hybridisation probes.

7. Therapeutic agents, which agents are directed at genes that affect the pathways in terms of the MDM2 gene and/or attack polymorphism A → G (GAA → GAG) at position 354 in exon 12 of the MDM2 gene or the genes associated therewith and, via regulation of transcription and translation and to influence their efficiency, act preferably by regulating expression.

8. Therapeutic agents, which agents are directed at the human MDM2 gene and attack the exchanged position A → G (GAA → GAG) at position 354 in exon 12 of the MDM2 gene and, via regulation of transcription and translation and to influence their efficiency, act preferably by regulating expression.

9. *In vitro* and *in vivo* test systems, which systems express the human MDM2 gene in the form having the mutation (polymorphism) A → G (GAA → GAG) at position 354 in exon 12 of the MDM2 gene, said test systems being used for investigating diseases involving the MDM2 gene and for developing and testing individually specific therapeutic agents in general.